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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,544

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Winfried K. W. Holscher

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NEW HAVEN, CT 06510

EXAMINER

GARCIA, ERNESTO

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,544	Applicant(s) HOLSCHER, WINFRIED K. W.	
	Examiner ERNESTO GARCIA	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-56 is/are pending in the application.
- 4a) Of the above claim(s) 40-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-39 is/are rejected.
- 7) ☒ Claim(s) 30,34,35,38 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

The status identifier of claims 40-47 were amended by the examiner since these claims were withdrawn by a restriction requirement.

Election of species

Claims 40-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected elected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 24, 2007.

Drawings

The drawings were received on February 1, 2008. These drawings are acceptable; however, the examiner noticed a few distinctions between the old figures and the new figures.

The drawings are objected to because the shank of the screw at the gap between head 52 and the bottom of the sleeve 34 is missing from Figure 1. Note that this feature was presented in the original figures. The grooves 32 in Figure 2 are square rather than triangular as originally filed. The thread is missing at the end of the shank 55 in Figure 3 as originally presented. This can be fixed by placing a vertical line on each side of the shank in Figure 3. Further, since the upper portion of the sleeve is shown in cross-section in Figure 3, the cross-sectional plane would have pass through the shank; however, the shank is not shown in the portion that is shown in cross-section, which would be the hexagonal region 38.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 38 is objected to because of the following informalities:

regarding claim 38, "shaped" in line 2 should be --outer--. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

Claims 29-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 29, the metes and bounds of the claim is still unclear. It is unclear whether any of the workpieces are part of the claimed invention? Note that the limitation "for connecting a first workpiece having an interior space to a second workpiece" in lines 2-3 inferentially suggests that both the clamping screw and the sleeve are intended for this particular purpose. However, the limitation "the clamping

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screw having a shank with engages in a longitudinal groove of the first workpiece" in lines 3-4 suggests that the first workpiece is positively recited. Accordingly, is the first workpiece part of the connecting device? For purposes of this Office action, the examiner has assumed the first workpiece being part of the connecting device.

Further, the recitation "is provided with a screw head" in line 12 makes unclear what is provided with a screw head. It appears that the threaded area is provided with the screw head; however, this is misdescriptive since the head 52 is provided in a non-threaded area since the shank does not have a thread all the way towards the head 52. The recitation "a profile side face" in line 22 lacks a point of reference. In other words, what has the profile side face?

Regarding claims 30-39, the claims depend from claim 29 and therefore are indefinite.

Claim Rejections - 35 USC § 103

Claims 29 and 31-34, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rixen et al., 5,192,145, in view of Shell, 4,775,259.

Regarding claim 29, Rixen et al. disclose, in Figures 1-4, a connecting device comprising a first workpiece **11**, a clamping screw **14**, and sleeve **16**. The clamping

screw **14** has a shank which engages in a longitudinal groove of the first workpiece **11**. The shank of the screw **14** passes through the sleeve **16**. The sleeve is provided with outer ribs and the sleeve **16** is fixed in the longitudinal groove of the first workpiece **11**. A threaded area **30** of the clamping screw **14** protrudes beyond a face **24** of the first workpiece **11**. The clamping screw **14** is provided with a screw head **13** at a distance from the threaded area. The threaded area **30** of the clamping screw has a nut screw head **15**. However, Rixen et al. fail to disclose the sleeve **16** having at least three groups of the ribs parallel to a longitudinal axis of the sleeve **16**.

Shell teaches switching a threaded shank **52** with ribs **88** between Figures 10 and 16 to make an alternative connection. Note that although Shell teaches one group of outer ribs, given the context that the thread makes contact at three locations, i.e., the bottom of the groove and in the two facing ribs of the longitudinal groove, one skilled in the art will design the ribs into three groups of ribs parallel to the longitudinal axis of the sleeve so that one group engages the bottom of the groove and the other two groups of the ribs will engage the facing ribs of the groove as an alternative to using a continuous thread on the sleeve for connecting the sleeve to one workpiece since this would allow the sleeve to be inserted all the way through a groove without having to screw the sleeve before hand all the way through a threaded position. Therefore, as taught by Shell, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the thread in Rixen et al. with the ribs, as taught by Shell, to alternative connect the sleeve with the workpiece such that the sleeve can be

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inserted all the way through before being threaded into the groove into a threaded position. Given the modification, the outer ribs would have been assigned to radial grooves in the groove bottom and in the facing ribs since Rixen et al. already teaches contact in three locations for holding the sleeve in the groove.

Regarding claim 31, given the modification, rib crests of a number of the outer ribs will run parallel to one another.

Regarding claim 32, given the modification, ribs crests of a number of the outer ribs will define a common annular contour.

Regarding claim 33, given the modification, the outer ribs of the sleeve can be inserted in the radial groove of the first workpiece.

Regarding claim 34, Rixen et al. discloses one sleeve edge **21'** of the sleeve fixed in the first workpiece, being approximately flush with a face of the first workpiece.

Regarding claim 36, the screw head is designed in a plate-shaped manner.

Regarding claim 37, a length of the screw head is shorter than a width of a groove space of the longitudinal groove, which receives the screw head.

Allowable Subject Matter

Claims 30 and 35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 30, the indication of allowability is based on the presumption that the workpieces are being claimed. The prior art of record does not disclose or suggest a connecting device comprising ribs merging with its rib faces into shaped channels of a sleeve outer face of a sleeve. Rixen et al., 5,192,145, as modified by Shell, 4,775,259, merely provide ribs. However, there is no motivation, absent applicant's own disclosure, to modify Rixen et al and Shell to include the shaped channels as is recited;

regarding claim 35, the indication of allowability is based on the presumption that the workpieces are being claimed. The prior art of record does not disclose or suggest a connecting device comprising a ring, made of elastic material and surrounding the threaded area of the clamping screw, arranged between a sleeve edge and a screw head. The closest prior art, Rixen et al., suggest a ring integral with the sleeve. However, there is no reason to modify the ring of Rixen et al. in the manner required by the claim since the ring is made of metal and is part of the sleeve. Modifying the sleeve

into an elastic material will not allow the sleeve to cut into the workpiece as modified;
and,

regarding claims 38 and 39, these claims directly or indirectly depend from claim
35.

Response to Arguments

Applicant's arguments filed October 25, 2007 have been fully considered but they are not persuasive.

Applicant argues that Rixen et al. patent shows that it fails to disclose three groups of outer ribs parallel to a longitudinal axis of a sleeve and that Shell does not disclose a sleeve. In response, the examiner acknowledges the observation. However, the applicant is presenting the arguments against the references individually. One cannot show nonobviousness by attacking references individually where the rejections are based on the combination of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant argues that Shell discloses a shaft with one group of outer ribs and thus does not disclose ribs on a sleeve. In response, it should be noted that the examiner is not relying on the shaft nor is the sleeve in Rixen et al. being replaced with the shaft of Shell. Rather, the examiner merely relies on the teaching that a thread can be replaced with ribs and that since the thread in Rixen et al. already makes contact in

three locations, it would have been obvious to replace the thread with the ribs and thus one would provide three groups or ribs to make contact in the same three locations made by the thread.

Applicant further argues that the ribs 88 in Shell are not exactly in line. In response, this argument is not commensurate with the scope of the claimed invention since the rejected claims do not recite the ribs being in line. Applicant further argues that "if Shell had more than one group of ribs, it would not fit into the space 37". In response, it should be noted that Shell is not being modified but rather Rixen et al. Applicant further argues that there is no hint to one of ordinary skill in the art to provide exactly "three" groups of ribs as it is not apparent from Rixen or Shell how many contact locations are needed. In response, the examiner disagrees, since one looking at figure 3 of Rixen et al. would see the thread engaging the edges of the groove and the bottom of the groove. The examiner would like to substantiate the response to the applicant's argument by pointing out that the passage at column 4, lines 54-60, explains the three locations.

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ege, AU-35151/89, shows a similar connecting device.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/E. G./

Examiner, Art Unit 3679

May 1, 2008

/Daniel P. Stodola/
Supervisory Patent Examiner, Art Unit 3679